

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 20, 21, 24-27, 30 and 31 are now present in the application. Claims 1-19 and 32-41 have been cancelled. Claims 20 and 27 are independent. Reconsideration of this application, as amended, is respectfully requested.

Claim Rejections Under 35 U.S.C. §112

Claims 32-41 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

Since claims 32-41 have been cancelled to expedite the prosecution, this rejection has been obviated and/or rendered moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, are therefore respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 20, 21, 24-27, and 30-41 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wagner et al., Applied Physics Letters pp. 89-90. This rejection is respectfully traversed.

Independent claims 20 and 27 recite combinations of elements including "at least one layer of a surface nanometer functional structure being formed on a surface of the nanostructure (in claim 20)/nanowire

(in claim 27), the surface nanometer functional structure includes at least one of a plurality of micro nanowires and a plurality of nanodots". Applicants respectfully submit that the above combinations of elements as set forth in independent claims 20 and 27 are not disclosed nor suggested by the reference relied on by the Examiner.

Applicants have presented the argument that Wagner merely teaches that the silicon whisker in FIG. 2a is a 1000-Angstrom whisker, rather than a nanostructure or a nanowire recited in claims 20 and 27, respectively (see page 89, lines 44-47). In response to this point, the Examiner stated that Wagner also discloses that the whisker can be in a wide range of dimensions. Therefore, the Examiner took the position that the silicon whisker teaches the nanostructure or a nanowire recited in claims 20 and 27. Applicants respectfully disagree.

In particular, Wagner never discloses that the silicon whisker is nanostructure or a nanowire. Instead, Wagner discloses

VLS growth of Si whiskers can occur over a wide range of cross-sectional dimensions, *as shown by the 1000 Angstrom whisker and the 0.2-mm needle in FIG. 2a and 2b.*

(Wagner, page 89, lines 44-47)(emphasis added).

In other words, Wagner merely teaches that the range of cross-sectional dimensions of the silicon whisker can be between 10^{-7}m and 10^{-4}m . Wagner fails to teach that the range of cross-sectional

dimensions of the silicon whisker can reach the level of the nanometer, *i.e.*, 10^{-9}m . It is impressible hindsight reconstruction based on Applicant's own disclosure to assert that the "wide range of cross-sectional dimensions" disclosed in Wagner teaches the level of the nanometer. The Examiner is simply making unsupported assumption, *i.e.*, "wide range" = "nanometer level", which is not taught in the prior art.

Since Wagner fails to teach each and every limitation of independent claims 20 and 27 or their dependent claims, Applicants respectfully submit that claims 20 and 27 and their dependent claims clearly define over the teachings of Wagner. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 are respectfully requested.

CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

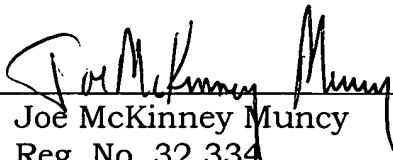
In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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